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APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
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10/688,125

10/17/2003

Jonathan N. Howarth

SU-7155-C

2030

7982 7590 04/01/2008

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EXAMINER

LEVY, NEIL S

ART UNIT

PAPER NUMBER

1615

MAIL DATE

DELIVERY MODE

04/01/2008

PAPER

Please find below and/or attached an Office communication concerning this application or proceeding.

The time period for reply, if any, is set in the attached communication.

Office Action Summary	Application No. 10/688,125	Applicant(s) HOWARTH ET AL.	
	Examiner NEIL LEVY	Art Unit 1615	

-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --

Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) OR THIRTY (30) DAYS, WHICHEVER IS LONGER, FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

Status

- 1) ☒ Responsive to communication(s) filed on 15 February 2008.
- 2a) ☐ This action is **FINAL**. 2b) ☒ This action is non-final.
- 3) ☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

Disposition of Claims

- 4) ☒ Claim(s) 1-8 and 15 is/are pending in the application.
- 4a) Of the above claim(s) _____ is/are withdrawn from consideration.
- 5) ☐ Claim(s) _____ is/are allowed.
- 6) ☒ Claim(s) 1-8 and 15 is/are rejected.
- 7) ☐ Claim(s) _____ is/are objected to.
- 8) ☐ Claim(s) _____ are subject to restriction and/or election requirement.

Application Papers

- 9) ☐ The specification is objected to by the Examiner.
- 10) ☐ The drawing(s) filed on _____ is/are: a) ☐ accepted or b) ☐ objected to by the Examiner.
Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).
Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).
- 11) ☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

Priority under 35 U.S.C. § 119

- 12) ☐ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
- a) ☐ All b) ☐ Some * c) ☐ None of:
1. ☐ Certified copies of the priority documents have been received.
 2. ☐ Certified copies of the priority documents have been received in Application No. _____.
 3. ☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).

* See the attached detailed Office action for a list of the certified copies not received.

Attachment(s)

- | | |
|--|---|
| 1) <input type="checkbox"/> Notice of References Cited (PTO-892) | 4) <input type="checkbox"/> Interview Summary (PTO-413) |
| 2) <input type="checkbox"/> Notice of Draftsperson's Patent Drawing Review (PTO-948) | Paper No(s)/Mail Date. _____ |
| 3) <input checked="" type="checkbox"/> Information Disclosure Statement(s) (PTO/SB/08) | 5) <input type="checkbox"/> Notice of Informal Patent Application |
| Paper No(s)/Mail Date <u>12/28/07://15/08</u> | 6) <input type="checkbox"/> Other: _____ |

DETAILED ACTION

The text of those sections of Title 35, U.S. Code not included in this action can be found in a prior Office action.

Claim Rejections - 35 USC § 102

Claims 1-4,6-8 & 15 stand rejected under 35 U.S.C. 102(e) as being anticipated by HOWARTH- US 20030077365A1

The applied reference has a common inventor with the instant application. Based upon the earlier effective U.S. filing date of the reference, it constitutes prior art under 35 U.S.C. 102(e). This rejection under 35 U.S.C. 102(e) might be overcome either by a showing under 37 CFR 1.132 that any invention disclosed but not claimed in the reference was derived from the inventor of this application and is thus not the invention "by another," or by an appropriate showing under 37 CFR 1.131.

The description at [0052] meets the instant claims, except for the density & size ; however, the size is within the claimed range (bottom of [0053], compacted granules of US mesh 6 to 0.312 inches. Continuous dispenser is discussed at [0055]& @ [0016-0029]. The dust free & density are provided @ the references incorporated by reference, describing DBDMH granule preparation[0028].

Claim Rejections - 35 USC § 103

Claims 1-8,15 are rejected under 35 U.S.C. 103(a) as being unpatentable over WHITE et al 4119535 in view of PATTERSON-3412021.

WHITE discloses superiority of DBDMH in methods of achieving sufficient free chlorine levels to treat biofilm in water (summary). Also useful are other dibromo methyl hydantoins(col. 7, bottom). Although comparison with BCDMH is not done, Br is shown as more stable & long lasting than Cl compounds (col. 4, lines 21-27). Thus, one desiring to achieve optimal sufficient free chlorine levels to disinfect pool water would find it obvious that DBDMH would be a superior form over a Cl, or BrCl granule of hydantoin, BCDMH included.

The use of granules for water treatment is discussed by Patterson for continual treatment(col. 2, lines 52-68). TABLE 1 teaches the solubility of the DBDMH as < BCDMH, thus able to provide a longer duration of action yet at the same or higher efficacy. Dissolution rate is shown to be a function of surface area/weight, hardness, & the specific formulation. Thus, one in the art, wishing to decrease the rate of dissolution of an effective disinfecting DBDMH granule, would apply sufficient pressure & sizing to meet the desired levels of effectiveness, over the desired period of time.

Such testing as required to optimize hardness & size while maintaining the required effective free Cl levels is within the skill of the artisan to perform with expectation of success (see 2007 supreme court decision in KSR V TELEFLEX @ 82 USPQ 2d @ 1385).

Paterson teaches such preparations can be prepared with or without binders (col. 7, lines 23-25). Although exemplified particles were 3/8 inch or more, it is clear that the granules can be smaller, with greater surface area/weight, if increased duration of effectiveness is desired. The granules used provided > 0.4 ppm active halogen (col. 11, top).

It would have been obvious to a person of ordinary skill in the art at the time the invention was made desiring to utilize water disinfectant granules, would have used the DBDMH modified as desired to increase stability, dispersibility, compatability of ingredients, processing ease, & reduced toxicity to handlers.

All the critical elements of the instant are disclosed. The amounts and proportions of each ingredient are result effective parameters chosen to obtain the desired effects. It would be obvious to vary the form of each ingredient to optimize the effect desired, depending upon the desired duration of effect, dissolution rate as taught controllable by Patterson by adjusting the hardness & size of the DBDMH granule.

Any inquiry concerning this communication or earlier communications from the examiner should be directed to NEIL LEVY whose telephone number is 571-272-0619.

The examiner can normally be reached on Tuesday-Friday, 7 AM to 5:30 PM EST..

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, MICHAEL WOODWARD can be reached on 571-272-8373. The fax phone

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number for the organization where this application or proceeding is assigned is 571-273-8300.

Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see <http://pair-direct.uspto.gov>. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free). If you would like assistance from a USPTO Customer Service Representative or access to the automated information system, call 800-786-9199 (IN USA OR CANADA) or 571-272-1000.

/NEIL LEVY/
Primary Examiner, Art Unit 1615
